REMARKS

Upon entry of the amendment, claims 93-101 will be pending.

Item 1. An amendment to the specification has been provided which adds the pages for the missing claims, 89-92, which were cancelled in the preliminary amendment.

Item 2. This item does not require a response.

Item 3. The Patent Office rejected claims 93-101 under 35 USC 102(e) as being anticipated by Oliphant '261. This rejection is respectfully traversed. Briefly stated, the prior art does not recognize the need for, or the benefits to be obtained from, controlling the processing of one type of communications (e.g., inbound communications) based on statistics particularly derived for a different type of communication (e.g., outbound communications). The prior art discloses controlling the processing of communications based on statistics for all the communications as a whole, not distinguishing between inbound or outbound communications. None of the cited art suggests or provides the claimed method of controlling communications.

No.

With respect to claim 93, the Patent Office alleged that Oliphant disclosed processing inbound communications (Col. 7, lines 13-18 and Appendix A, labels NQ and NA), processing outbound communications (Col. 7, lines 13-18, Col. 13, lines 7-10, and Appendix A, label NS), obtaining a statistic on the outbound communications (Appendix A, equations 13 and 14), and adjusting the processing of the inbound communications based on the statistic (Appendix A, equation 12).

Independent claim 93 specifically requires: "obtaining a statistic on said outbound communications" and "adjusting said processing of said inbound communications based upon said statistic."

A close look at the cited sections reveals that Oliphant does keep certain statistics, but Oliphant only uses the statistics to control the pacing of <u>outbound</u> calls. (Abstract; Col. 2, lines 48-58; Col. 4, lines 13-15; Col. 5, lines 61-66; Col. 6, lines 5-11, 40-48 and 60-63; Col. 12, lines 52-57.) The equations cited in Appendix A do not control the processing of inbound

communications. These equations are simply used to determine whether more outbound communications should be placed. (Col. 12, lines 52-57.) Oliphant does not use, nor suggest that it is possible to use, or suggest that one should use, any statistics on <u>outbound</u> communication to adjust processing for <u>inbound</u> communications. More precisely, Oliphant simply handles inbound communications in the basic prior art manner of answering an inbound communication if an agent is available, and putting them in a first-in, first-out queue if an agent is not available. (Col. 1, lines 34-36; Col. 5, lines 11-22.) Thus, claim 93 is not anticipated by Oliphant. Further, in view of the disclosure of Oliphant as discussed above, claim 93 is not obvious in view of Oliphant. Therefore, claim 93 is patentable over Oliphant.

Claims 94 and 95 depend from claim 93 and are therefore also patentable over Oliphant.

Further, with respect to dependent claims 94 and 95, the cited section (Appendix A, equation 12) merely states that, for purposes of outbound call pacing, NQ (the number of calls queued awaiting a server) is deemed to be 0 if NS (the number of outbound calls being set up) is greater than or equal to QMAX (the maximum number of calls permissible in the queue), and is deemed to be QMAX less NS if NS is less than QMAX. Note that these calculations are only used for determining the pacing of outbound calls, and are not used, nor suggested to be used, for controlling, in any manner, the processing of inbound calls. Although Oliphant may keep some sort of statistic on total communications, Oliphant neither suggests nor discloses that statistics on inbound and outbound communications should be determined separately and used separately.

Claim 94 requires "reducing the number of said inbound communications which are connected to said agents if said statistic exceeds a predetermined value". Oliphant neither suggests nor discloses reducing the number of inbound communications connected to an agent if a statistic on outbound communications exceeds a predetermined value. Agents are connected to communications based solely on agent availability and call hold time. Therefore, claim 94 is further patentable over Oliphant.

Claim 95 requires "said step of obtaining a statistic on said outbound communications comprises obtaining information on the duration of said outbound communications, and said step of adjusting said processing comprises reducing the number of said inbound communications which are connected to said agents if said duration exceeds a predetermined value." Oliphant discloses that agents are connected to communications based solely on agent availability and call

hold time. Oliphant neither suggests nor discloses that the duration of outbound communications should have an effect on the processing of inbound communications, and certainly does not disclose reducing the number of inbound communications connected to an agent if that duration statistic on outbound communications exceeds a predetermined value. Label S is the setup time of an outbound call, not the duration of the outbound call, and is not used for determining how an inbound communication should be processed. Label R is the rate of connection to servers, and appears to be a total statistic, not an outbound statistic nor an inbound statistic. Further, as best as can be determined, labels R and S are used for outbound call pacing, not for determining how to process an inbound communication. Therefore, claim 95 is further patentable over Oliphant.

Independent claim 96 requires "obtaining a statistic on said inbound communications; and adjusting said processing of said outbound communications based upon said statistic." The Patent Office has referred to Oliphant labels NA, NQ, DMAX. However, NA is "the number of calls connected to servers" (both inbound and outbound, without distinguishing one from the other), NQ is "the number of calls queued awaiting a server" (both inbound and outbound, without distinguishing either), and DMAX is the "maximum permissible average delay in queue" (both inbound and outbound, without distinguishing either). Thus, Oliphant does not distinguish between inbound and outbound communications when adjusting the processing of outbound communications but simply treats them all the same. As a result, Oliphant does not use, and cannot be said to suggest the use of, obtaining a separate statistic on inbound communications, and using that statistic on inbound communications (as opposed to a statistic on all communications) to adjust the processing of outbound communications. Accordingly, claim 96 is patentable over Oliphant.

Dependent claims 97 and 98 depend from claim 96 and are therefore also patentable over Oliphant.

Dependent claim 97 requires that the "step of processing outbound communications comprises initiating said outbound communications, and said step of adjusting comprises reducing the number of said outbound communications which are initiated if said statistic exceeds a predetermined value." Oliphant treats all calls the same for purposes of the statistics. Note that NA and NQ refer to the number of calls, not the number of inbound calls, and not the

number of outbound calls. Oliphant neither suggests nor discloses that one should look to a statistic on inbound calls (as opposed to all calls) for reducing the number of outbound communications. Therefore, claim 97 is further patentable over Oliphant.

Dependent claim 98 requires that the "step of processing outbound communications comprises initiating said outbound communications, said step of obtaining a statistic on said inbound communications comprises obtaining information on the duration of said inbound communications, and said step of adjusting said processing comprises reducing the number of said outbound communications which are initiated if said duration exceeds a predetermined value." Oliphant treats all calls the same for purposes of the statistics. Note that NA and NQ refer to the number of calls, not the number of inbound calls, and not the number of outbound calls. Oliphant neither suggests nor discloses that one should look to any statistic on inbound communications (as opposed to all calls), much less a statistic on the duration of inbound communications, for reducing the number of outbound communications. It should also be noted that Oliphant does not even refer to the duration of communications in his calculations. Rather, Oliphant refers to the "average server hold time" (H) - which does not distinguish between inbound and outbound communications, the "average calls set-up time" (S) - which is for outbound communications, and the "average delay in queue" (D) - which, again, does not distinguish between inbound and outbound communications. Oliphant then adjusts the placement of outbound calls based upon the average (Q) and maximum (QMAX) number of calls in a queue, not based upon any statistic based upon the duration of the inbound communications. Therefore, claim 98 is further patentable over Oliphant.

Independent claim 99 requires "obtaining a statistic on said inbound communications; and providing for adjusting said processing of said outbound communications based upon said statistic." The Patent Office has referred to Oliphant labels NA, NQ, DMAX. However, NA is "the number of calls connected to servers" (both inbound and outbound, without distinguishing one from the other), NQ is "the number of calls queued awaiting a server" (both inbound and outbound, without distinguishing either), and DMAX is the "maximum permissible average delay in queue" (both inbound and outbound, without distinguishing either). Thus, Oliphant does not distinguish between inbound and outbound communications when adjusting the processing of

outbound communications but simply treats them all the same. As a result, Oliphant does not use, and cannot be said to suggest the use of, obtaining a separate statistic on inbound communications, and using the statistic on inbound communications (as opposed to a statistic on all communications) to provide for adjusting the processing of outbound communications. Accordingly, claim 99 is patentable over Oliphant.

Dependent claims 100 and 101 depend from claim 99 and are therefore also patentable over Oliphant.

Dependent claim 100 further requires that the "step of providing for adjusting said processing comprises reducing the number of said outbound communications which are initiated if said statistic exceeds a predetermined value." Oliphant treats all calls the same for purposes of the statistics. Note that NA and NQ refer to the number of <u>calls</u>, not the number of inbound calls, and not the number of outbound calls. Oliphant neither suggests nor discloses that one should look to a statistic on inbound calls (as opposed to <u>all</u> calls) for reducing the number of outbound communications. Therefore, claim 100 is further patentable over Oliphant.

Dependent claim 101 further requires that the "step of obtaining a statistic comprises obtaining information on the duration of said inbound communications, and said step of providing for adjusting said processing comprises reducing the number of said outbound communications which are initiated if said duration exceeds a predetermined value." Oliphant treats all calls the same for purposes of the statistics. Note that NA and NQ refer to the number of <u>calls</u>, not the number of inbound calls, and not the number of outbound calls. Oliphant neither suggests nor discloses that one should look to any statistic on inbound communications (as opposed to <u>all</u> calls), much less a statistic on the duration of inbound communications, for reducing the number of outbound communications. It should also be noted that Oliphant does not even refer to the duration of communications in his calculations. Rather, Oliphant refers to the "average server hold time" (H) - which does not distinguish between inbound and outbound communications, the "average calls set-up time" (S) - which is for outbound communications, and the "average delay in queue" (D) - which, again, does not distinguish between inbound and outbound communications. Oliphant then adjusts the placement of outbound calls based upon the average (Q) and maximum (QMAX) number of calls in a queue, not based upon any statistic

based upon the duration of the inbound communications. Therefore, claim 101 is further patentable over Oliphant.

The recommendation of the examiner regarding "managing" is appreciated. Accordingly, the summary has been amended, based upon the pending claims, to include the term "managing".

Items 4 and 5. These items do not require a response.

INFORMATION DISCLOSURE STATEMENT

The citation of information on the attached Form PTO SB08A, "Information Disclosure Statement by Applicant, is made pursuant to 37 C.F.R. §§ 1.56, 1.97, and 1.98. A copy of each cited item is enclosed.

The citation of this information does not constitute an admission of priority or that any cited item is available as a reference, or a waiver of any right the applicant may have under applicable statutes, Rules of Practice in patent cases, or otherwise.

This Information Disclosure Statement is based upon the search report from a European divisional patent application based upon the same parent application, serial no. 07/553489 filed June 5, 1990. The two documents cited in the search report as being category X are discussed below.

Document A8, IBM Technical Disclosure Bulletin "Computerized Call Return Feature" (IBM) discloses a technique for automatic callback services. The call return software "calculates current queue lengths and expected queue delays. The calculations are based on call duration calculated from adaptive measurements and on queuing theory applied to telephone call arrival behavior. It is responsible for activating call origination hardware and software for the queued call return number when the number's queue position rises to the call return threshold and call creation hardware is available. The "threshold" is the expected delay that the return call party will tolerate on hold." (Page 4900, second paragraph.) However, IBM does not disclose how the "expected delay" is calculated, and clearly does not disclose or suggest that separate statistics be kept in inbound or outbound communications to calculate the expected delay. Thus, IBM does

not suggest or disclose that statistics on inbound communications (as opposed to statistics for all calls as a whole) should be used to adjust the processing of outbound communications, nor that statistics on outbound communications (as opposed to statistics for all calls as a whole) should be used to adjust the processing of inbound communications. Thus, the claims are patentable over IBM.
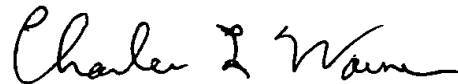
Document A6, EPA 0376517, corresponds to Document A4, US Patent No. 5062103 by Davidson et al. (Davidson). Davidson was discussed in the parent application to this case, serial no. 07/553489. Although table six of Davidson discloses that separate statistics should be kept for inbound calls and outbound calls, Davidson table six is a representation of station activity data which may be used to _evaluate_ agent station activity. Davidson intends that the data is to be displayed to a manager by means of a CRT display. References below are to Document A4 (Davidson '103). (Col. 10, lines 34-49; Col. 12, lines 25-30; Table 6; Figs. 4, 6, 7, and 8.) Further, with respect to inbound calls, Davidson suggests that agents be selected on the basis of which station has the most idle time or, with respect to outbound calls, is least utilized. (Col. 7, lines 8-10; Col. 12, lines 31-34; Col. 13, lines 53-55; Col. 14, line 67 - Col. 15, line 1; Figs. 9 and 10.) Davidson therefore does not disclose, or in any way suggest, that these statistics should have any effect whatsoever on the processing or adjustment of outbound communications or inbound communications. Thus, the claims are patentable over Davidson.

Even combining Oliphant, IBM, and Davidson, there is no suggestion that separate statistics be kept for inbound and outbound communications, and that the statistics for one type of communication (e.g., inbound) be used to adjust the processing of the other type of communication (e.g., outbound). Thus, the claims are patentable over Oliphant, IBM, and Davidson, singly and in combination.

CONCLUSION

It is believed that the above is completely responsive to the Office Action mailed April 2, 2002, and that the claims are allowable. If there are any issues which can be resolved by an examiner's amendment or a telephone conference, it is requested that the examiner call the undersigned at (404) 885-3275.

Respectfully submitted,

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APPENDIX A

PAGES (COLUMNS) 35-38 OF THE SPECIFICATION